
 membrane element and said core and which, at least partially, overlap one another and have been fused to one another in the area of overlap.


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 7. (Once Amended) A process for producing a membrane element, providing a core, having a membrane element surrounding said core, (9) with a sheath by winding a polymer film (10) around said membrane element and said core (9), where individual layers (11) of the polymer film (10) at least partially overlap one another and supplying energy to fuse the polymer films to one another in the area of overlap.

8. (Once Amended) The process as claimed in claim 7, wherein said winding comprises winding the polymer film (10) as a layer spirally around the membrane core (9), where the individual laps of the layer (11a) overlap to some extent.

9. (Once Amended) The process as claimed in claim 7, wherein said winding further comprises winding the polymer film (10) as a layer spirally around the membrane core (9) and laying the individual laps of the layer (11b) alongside one another, without overlapping each other, and form a first layer, and further comprising winding at least one further layer of polymer film (10) layers lying alongside one another over the first layer, and then fusing this to the layer lying thereunder.


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 (Please add the following claims:

 15. (New) A membrane assembly according to claim 1, wherein said membrane element further comprises at least one spirally wound element.

16. (New) A membrane assembly according to claim 15, wherein said at least one spirally wound element further comprises at least one doubled membrane layer.

17. (New) A membrane assembly according to claim 16, wherein said at least one doubled membrane layer comprises two membranes.



18. (New) A membrane assembly according to claim 17, wherein said membranes each comprise an active surface.

19. (New) A membrane assembly according to claim 18, wherein said membranes are positioned relative to one another, such that the active surface of each membrane faces away from the other membrane.

20. (New) A membrane assembly according to claim 18, wherein said membranes are fused together on three sides and form a membrane pocket.

21. (New) A membrane assembly comprising:

(a) a core comprising a cylindrical pipe having perforations or holes therein;

(b) a membrane element surrounding said core and comprising spirally wound elements,

said spirally wound elements comprising one or more doubled layers of membrane,

said doubled layers bonded or fused to one another on three sides to form a membrane pocket having an open side;

said open side of said membrane pocket bonded to said pipe in the region of said perforations or holes;

(c) a spacer sheet comprising a polypropylene net spirally wound, together with said membrane pockets, around said core


(d) at least one polymer film comprising at least one functionalized surface;

(e) a sheath, having a thickness of 0.3 to 28 mm, surrounding said membrane element and said core, said sheath formed from said polymer film wound spirally around said membrane element and said core such that said polymer film at least partially overlaps itself and such that said polymer film is fused together in the region of said overlap.

22. (New) A membrane assembly according to claim 21, wherein said polymer film is a polypropylene film or polyester film.

23. (New) A membrane assembly according to claim 22, wherein said polymer film is a coextruded film.

24. (New) A membrane assembly according to claim 23, wherein said coextruded film comprises a base layer and at least one outer layer, wherein the melting point of the outer layer is lower than that of the base layer polymer.

 25. (New) A membrane assembly according to claim 24, wherein the melting point of the outer layer polymer is from 70 to 130°C.

26. (New) A membrane assembly comprising:

(a) a core;

(b) a membrane element surrounding said core;

(c) a sheath, having a thickness of 0.3 to 28 mm, which surrounds said membrane element and said core, wherein said sheath comprises polymer films wound around said membrane element and said core and which, at least partially, overlap one another and have been fused to one another in the area of overlap.

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